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AUTHOR Bass, Ronald K.; Dills, Charles R.
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ABSTRACT

This chapter summarizes the state of the art of instructional development and characterizes instructional developers in terms of the chapters in both volumes of "Instructional Development: The State of the Art," other literature in the field, and the personal experiences of the authors. A number of conclusions are drawn, and the nature of the field--i.e., whether instructional development is a science, an art, or some combination of both--is briefly discussed. Topics that have been the focus of research are noted, as well as probable future developments in this area. (58 references/notes) (Author/EW)

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IX. SUMMARY

Chapter 48

Instructional Development: The State of the Art

Ronald K. Bass
Charles R. Dills

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The state of the art in instructional development is becoming more simple and, at the same time, is becoming more complicated. It is becoming more simple in that the basic concepts of instructional development are more universally accepted than they were a few years ago and the basic skills of instructional development are held by far more professionals than they were those same few years ago. It is becoming more complicated in that much new knowledge and many new theories are coming to bear upon instructional development for those on the cutting edge of the ID movement.

Not many people thought, as few as four years ago, that so many public school media specialists would be expressing interest in, or, in fact, practicing, instructional development. Not many people foresaw the increase of interest within business and industry in the formation of instructional development units. Not many people anticipated the growth of ID professional interest groups in various national organizations and in many state organizations (as an example, The Florida Association for Media in Education (FAME) is in the process of forming an ID division and has had excellent attendance at ID sessions at its annual conferences in 1980, 1981, and 1982, consisting of about 85 percent public school media specialists). Even fewer were far-sighted enough to envision many of the new inputs which professional instructional developers must consider.

What is the state-of-the-art of instructional development? Instructional Development: The State Of The Art (Bass, Lumsden, and Dills, 1978) was intended to be Step One in describing/defining **The State Of The Art,** in a limited way, and much has been written in the field since. Yet each new work in the field, while better defining instructional development, also raises new questions as to what instructional development really is. Two early chapters in this book (Braden; Dills and Bass)[1] raise critical questions concerning "ID's place in space." Is it an art, or a science, or both, or neither? This work, even though it takes a major step in defining who we are, what we do, and why, falls short of completely describing the (compared to 1978) more sophisticated, better-rooted-in-science nature of instructional development. Instructional development is still evolving.

Our 1978 work (Bass, Lumsden, Dills, 1978) was a far more narrow (chapters) look at the art of ID than is this work and really branched away from the then "traditional" look at ID in only three chapters: "Comprehension and the Design of

[1] Citations without publication dates refer to previous chapters in this book.

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Instructional Materials" (Wilson, 1978), "Cognitive Style Mapping: Its Place in Instructional Design" (Bass and Hand, 1978), and "Collective Bargaining: Adversary or Colleague" (Schaffer, 1978). This work, on the other hand, has departed from the "traditional" considerably in order to look at many new areas of thinking/information which is impacting or will impact ID (Hutchinson; Travers; Wilson; Hand; Stahl; Newell; Merrell; Shrock; DuToit; Wolf; Silber; Blalock), while at the same time providing sound information as to the underpinnings of the ID profession and some very practical views of what is happening on the "firing line" of the field today.

With the above disclaimers, the following is what we, drawing upon the works in this book and other writings, see as the state of the ID art.

We see a field in which practitioners are working very hard to describe themselves and to delineate their activities. We see a field which is indeed looking for its place in space, (Braden). We see a field which is carefully analyzing the training which is being provided for aspiring instructional developers (Silber; Duncan; Daughty and Durzo, 1981; Silber, 1981; Bass and Duncan, 1981-82; Miller and Naumer, 1979-80; Bratton, 1981; Markle, 1981; Wallington, 1981), and we realize that there are differences in the training provided by different schools (Dick and Morgan; Gustafson and Schuller). Attempts to legitimize the services provided by instructional developers are also underway on many fronts (AECT, NSPI, ASTD, etc.) and professional certification of IDers is probably not far from reality (Bratton; Duncan).

We see a field which has moved from a predominantly higher education orientation (Durzo, 1978; Bratton, 1978) to a more universal orientation--public school (Turner), business and industry (Wallington; Durzo, 1983; Kroh, 1983; Miles, 1983; Hart, 1983; Becker and Davis, 1983; Patton, 1980; Wallington, 1980), the military (Platt and Andrews; Goldman) and the international scene (Austin and Titus; Kerr). Higher education, however, has not been forgotten in the work with a look at the strange world of ID in higher education (Terrell and Shrock), and explanations of some specific techniques for diffusion of ID techniques in higher education (Lawrason; McBeath) along with some guidance in selection of an orientation for development activities (Abedor and Sachs). General techniques of diffusion are also presented (Durzo and Florini; du Toit; Wolf), which bring some new thoughts to bear upon the diffusion of ID.

We see a field which for the most part is taking a careful look at the evaluation of the products/processes it produces in the traditional sense (Baker; Baker and Alkin), and is even posing other ways of viewing/evaluating its products/processes (Shrock). Unfortunately, we do see many shops which are operating under the guise of I.D. while not really paying attention to the evaluation of their products at all.

We see a field which is diligently trying to find its place in space (Braden) and is searching for a delineation of its basic scientific underpinnings (Davis; Hug and King; Hutchinson; Schwenn, Lietzman, Misanchuk, Foshay, and Heitland), as well as for theories which can form the basis for the design which instructional developers undertake (Travers; Wilson; Hand; Hand, 1982a; Hand, 1982b; Stahl).

We see a field which is constantly evaluating/re-evaluating designs and techniques which are evolving in the field (Lamos; Osterman; Thomas, Stahl, and Swanson; Merrill; Hand; Stolovitch; Newell) and one which is constantly analyzing ID models as the ideal approach or approaches is/are sought (Trimby and Gentry; Gustafson, 1981; Andrews and Grodson, 1980; Kaufman, Stakenas, Wager, and Myer, 1981; Gentry and Trimby).

We see a field which is interested in interacting with ID clients as effectively as possible (Coscarelli and Stonewater; Price; Rutt), interacting with support personnel as effectively as possible (Mullally), and interacting/understanding subgroups within the field (Dickerson).

We see a field which is interested to some degree in dealing with the cost-effectiveness of ID (Diamond; Wilkerson, 1978), but a field which has not devoted as much attention to this concern as would be justified by the austerity of the times or by the accountability demands which are sure to be made of it.

We see a field which lacks a unified underlying literature. There are works upon which a good many of us rely (Braden and Sachs, 1983), but better efforts must be made to chronicle what instructional developers do, and why. This book takes a major step in the needed direction, our 1978 book (Bass, Lumsden and Dills, 1978), helped, JID (The Journal of Instructional Development) helps tremendously, but a broader literature is needed to help establish ID's place in space.

We see a field in which The Division of Instructional Development (DID) of the Association for Educational Communications and Technology (AECT) was once clearly the leading organization, but is rapidly losing influence as other organizations turn their attention to ID (the National Society for Performance and Instruction (NSPI) and the American Society for Training and Development (ASTD) for example). We see less emphasis upon the utilization of IDers in higher education in the broad sense while we are seeing more emphasis on the use of IDers in the health sciences areas of higher education and in business and industry (both as training officers within major corporations and as consultants to business and industry operating out of instructional development companies). We see the military carrying a great number of instructional developers on their payrolls but anticipate that in the very near future this number will be reduced sharply in favor of the contracting of ID services from independent instructional development/design companies.

We see a field which will undoubtedly take a closer look at the individual differences among the

trainees for which the instruction is being designed. The vehicle may be Educational Cognitive Style Mapping (Bass and Hand, 1978; Hill, 1981), the vehicle may be 16PF (Krug, 1981; Cattell, Eber, and Tatsuoka, 1970), the vehicle may be the Meyers-Briggs Type Indicator (Meyers, 1962; Meyers, 1970). All have potential, but this potential must be explored and then incorporated into ID practice.

We see a field which wishes to become a profession (Braden; Schwenn, Lietzman, Misanchuk, Foshay, and Heitland; Wallington; Turner; Silber; Duncan; Bratton; Gustafson and Schuller; Dickerson). This means, among other things, a field whose practitioners regulate their own behavior according to agreed-upon ethical standards (Silber; Finn 1953). It also means that those practitioners understand their own professional behavior patterns, since such an understanding must underlie any rational attempt to formulate such an ethical system. We see a field, however, which has devoted little time or thought to the systematic investigation of its own behavior, with the single exception of investigations of consulting behavior (Coscarelli and Stonewater; Price; Rutt).

We see a field which is in need, therefore, of an investigation of many other aspects of its own behavior, and of that of its members. Networks and circles (Kadushin 1976, 1975, 1974, 1968) play a role in many aspects of our practice. We need to know which kind(s) of circles and networks we form, and how our networks are affected by such things as the control of our reward system(s). We need to know more about our own reward system, both laterally and vertically (Crane, 1976). What sort of social community do we form, and how does this community interact with other communities, and with the larger community? What kinds of career patterns do IDers follow, and is there considerable variation in the career patterns, networks, reward systems and communities among the different segments of the ID job market?

We have seen that we are very involved with culture - its production, change and distribution as this concept (culture) is dealt with by anthropologists (du Toit). We have seen, further, that there have been many investigations of this aspect of our professional practices (Wolf, Jr.; Durzo and Florini; Abedor and Sachs, 1978; Lawrason, 1978).

We see a profession which exists for no other reason than to produce symbol systems and concrete embodiments of these systems, and to distribute them. We see a profession which is in need of an understanding of how its members interact in the production of these symbols and their embodiments. This understanding requires both a sociological analysis of how IDers interact as a culture, and an analysis of our symbol systems in terms of symbology, an aspect both of linguistics and of anthropology. It also requires an analysis in terms of the concepts developed within the sociological study of culture production (Peterson, 1976). Such studies would not only provide us with an understanding of ourselves as a culture and as a sociological community, it would also provide part of the basis for formulating an adequate code of behavior/ethics by which to provide ourselves with self-regulation, a necessary condition for becoming a profession (Silber; Finn, 1953). It would also aid in student job placement, program development, and in analyzing client-consultant interactions.

We see a field which rejects much. Although there are notable exceptions, IDers have mostly rejected, or ignored, techniques derived from behavior modification, the experimental analysis of behavior, and programmed instruction. Little has been done with cognitive behavior modification. Little use has been made of microfiche as a teaching medium. Likewise, student-response systems, fully integrated multi-media approaches, and multiple approaches to course content based upon variations in cognitive style have only been sparsely tried. Media selection models, in practice if not in theory, have yet to become much more than ways to select our own favorite media.

On the other hand, we have widely embraced television, computers, video disks, task analysis, and behavioral objectives. We need an understanding of how and why we, as a profession, choose among the available innovations. We are the gatekeepers, to a large degree, for these innovations; we determine which ones the clients, who are gatekeepers on a different level, are allowed to choose among. How do we decide which to embrace and which to reject, culturally (Heirich, 1976)? When we can answer this question, we will have the basis for a truly adequate development of the concept of cost-effectiveness (Wilkinson, 1978). And only then can we move from **only being efficient** to **being both efficient and effective** (Davies). Again, these questions require the use of both the anthropological paradigm of culture (DuToit) and the sociological paradigm of culture production (Peterson, 1976).

We see a field which will become even more sophisticated in knowledge of neurological science and will begin to use in a meaningful way research on the brain (Hand; Black, 1982; Bradshaw and Nettleton, 1981; Diamond, 1980; Duden-Smith, 1980; Ferguson, 1980; Hampden-Turner, 1981; Horn, 1982; Hand, 1982a; Hand, 1982b; Jastrow, 1981; Kinsbourne, 1982; Ross, 1982). We see a field which will be confronted with new concerns for individuals, which will affect the design of instruction. An example of these concerns would be "stress," a current "hot topic" (Dorscher, 1983; Wallis, 1983; Dee-Brunett, Kulhany, and Krieg, 1983). The last of these three references is to the work of a group which has formed a company with extensive training programs for individual stress management.

And, at the same time we see a field which is attempting to better understand the most basic of our tools for distribution of instruction--the textbook (Thomas, Stahl, and Swanson; Johanson, 1982).

Instructional developers are a diverse group. They operate in many settings. They operate with many and varied restraints and constraints. They operate under many different sets of expectations. Their successes are measured in many different ways. They are trained in many different ways.

Yet they seem to communicate when given a chance, seem to understand one another, and even though from varying backgrounds and settings seem to input valuable information to one another.

Instructional development seems to be an art practiced by many in many different ways, yet seems to be based upon some sciences or areas of science upon which all (or most) draw for solutions to their problems or for communication of their problems to others.

Attempts at defining "The State Of The Art" in this chapter, in Chapter I of this book (Dills and Bass), or in the predecessor of this book, Instructional Development: The State Of The Art (Bass, Lumsden, and Dills, 1978), fall short. It is awfully difficult to paint a picture of something in motion and our ever- changing field is rapidly evolving.

Futuristic looks (this chapter; Blalock; Boutwell, 1979) at instructional development have a way of being accurate and inaccurate and somewhat accurate all at the same time. Perspective is all important.

Let's live the future responsibly and professionally and experience "the state of the ID art" together.

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